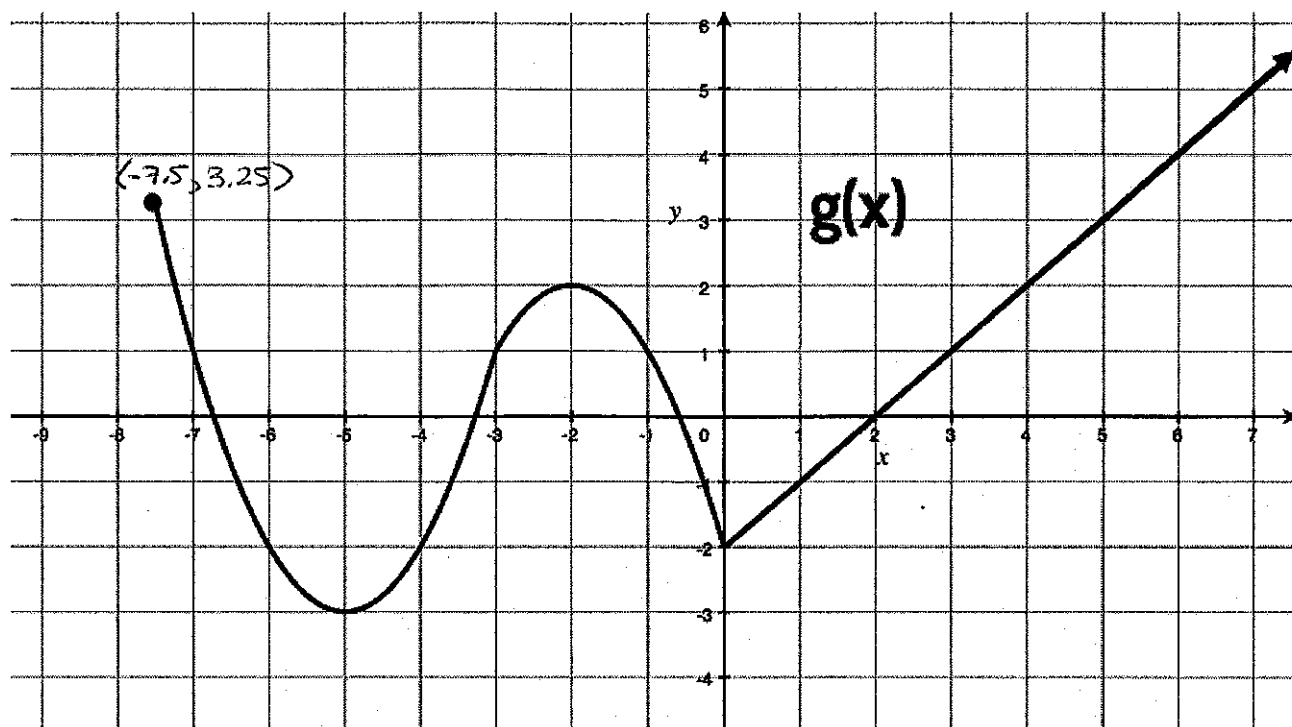


Pre Calculus Honors
1.5 Classwork/Homework

Name:
Date:



Domain:	Range:
Increasing:	Decreasing:
Maximum:	Minimum:
$f(x) > 0$	$f(x) \leq 0$
x-intercept(s):	y-intercept:
Bounded?	End Behavior?

Complete the following problems:

In Exercises 9–16, find the domain of the function algebraically and support your answer graphically.

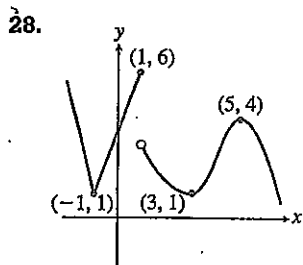
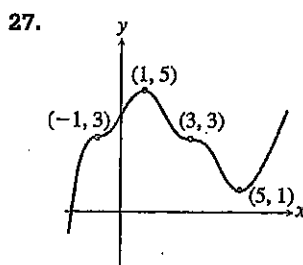
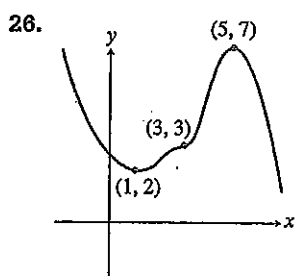
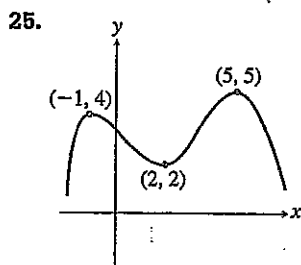
9. $f(x) = x^2 + 4$

11. $f(x) = \frac{3x-1}{(x+3)(x-1)}$

13. $g(x) = \frac{x}{x^2 - 5x}$

15. $h(x) = \frac{\sqrt{4-x}}{(x+1)(x^2+1)}$

In Exercises 25–28, state whether each labeled point identifies a minimum, a local maximum, or neither. Identify intervals on which the function is decreasing and increasing.



Graph the function and tell whether or not it has a point of discontinuity @ $x=0$. If it does, tell whether it is removable, or nonremovable.

21. $g(x) = \frac{3}{x}$

24. $h(x) = \frac{x}{x-2}$